

In the Specification

Please replace the paragraph beginning at line 13 on page 4 with the following:

Long-time survival of the cells in the cultivation thereof inside the patient's body proves to be useful for the treatment of a number of diseases, which requires transplantation of autologous or heterologous (allogenic and xenogenic) cells producing biologically active compounds whose deficiency in the organism aggravates or initiates the disease.

In the Claims

Please cancel claims 1-18 and add the following new claims:

- Rule 1.726*
- C1*
- ~~24~~  
~~19.~~ A method comprising forming a polyacrylamide gel capsule in a tissue of a mammal wherein the capsule is adapted for cultivating transplanted allogenic or xenogenic cells for a period of time.
- ~~25~~  
~~20.~~ A method according to claim ~~19~~<sup>24</sup>, wherein the mammal is a human.
- ~~26~~  
~~21.~~ A method according to claim ~~20~~<sup>25</sup>, wherein the mammal suffers from a pathology and the method comprises cultivating in said polyacrylamide gel capsule transplanted allogenic or xenogenic cells that aid in treating the pathology.
- ~~27~~  
~~22.~~ A method according to claim ~~21~~<sup>26</sup>, wherein the pathology is diabetes mellitus.
- ~~28~~  
~~23.~~ A method according to claim ~~21~~<sup>26</sup>, wherein pancreatic  $\beta$ -cells are cultivated in said polyacrylamide gel capsule.
- ~~29~~  
~~24.~~ A method according to claim ~~23~~<sup>28</sup>, wherein the pancreatic  $\beta$ -cells are cells from newborn rabbits or young pigs.
- ~~30~~  
~~25.~~ A method according to claim ~~19~~<sup>24</sup>, wherein the polyacrylamide gel capsule is formed by subcutaneous injection of a polyacrylamide gel into the mammal.
- ~~31~~  
~~26.~~ A method of cultivating allogenic or xenogenic cells of a mammal, comprising introducing a polyacrylamide gel into a mammal, thereby inducing formation of a connective tissue capsule around said gel, and thereafter, injecting allogenic or xenogenic cells of a mammal into said gel.
- ~~32~~  
~~27.~~ A method according to claim ~~26~~<sup>31</sup>, wherein the gel is introduced by

subcutaneous injection.

<sup>33</sup>  
~~28~~ A method according to claim <sup>31</sup>~~26~~, which comprises formulating a vaccine preparation comprising said cultivated cells.

<sup>34</sup>  
~~29~~ A method according to claim 6, wherein said allogenic or xenogenic cells are tumor cells.

<sup>35</sup>  
~~30~~ A method according to claim 6, wherein said allogenic or xenogenic cells are Leydig's cells.

<sup>36</sup>  
~~31~~ A method of treating a pathology in a mammal, comprising introducing a polyacrylamide gel into a mammal, thereby inducing formation of a connective tissue capsule around said gel, and thereafter transplanting allogenic or xenogenic cells of a mammal into said gel, said cells producing a biologically active substance which is released from said capsule.

<sup>37</sup>  
~~32~~ A method according to claim <sup>36</sup>~~31~~, wherein said pathology is diabetes mellitus, said transplanted cells are pancreatic  $\beta$ -cells, and said biologically active substance is insulin.

<sup>38</sup>  
~~33~~ A method according to claim <sup>37</sup>~~32~~, wherein said  $\beta$ -cells are from newborn rabbits or young pigs.

#### Title

Please amend the title to read: - - USE OF POLYACRYLAMIDE GEL FOR FORMING A CONNECTIVE-TISSUE CAPSULE IN A MAMMAL FOR CULTIVATING ALLOGENIC AND XENOGENIC CELLS - -

#### Remarks

Applicants first wish to point out that two preliminary amendments were submitted prior to the examination of this application on the merits.

Copies of the amendments (preliminary amendment and second preliminary amendment) are enclosed herewith together with copies of postcards received from the Patent Office indicating the respective dates of receipt of the amendments by the Patent Office.